

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/015025

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl⁷ C21D1/76, C21D9/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl⁷ C21D1/76, C21D6/00, C21D9/46Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2005
Kokai Jitsuyo Shinan Koho 1971-2005 Jitsuyo Shinan Toroku Koho 1996-2005Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WPI, ELSEVIER, JOIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|---|-----------------------|
| Y | JP 10-72624 A (Nisshin Steel Co., Ltd.), 17 March, 1998 (17.03.98), Par Nos. [0001] to [0004] (Family: none) | 1-3 |
| Y | JP 2003-247787 A (Chugai Ro Co., Ltd.), 05 September, 2003 (05.09.03), Par No. [0006] & EP 1338659 A1 | 1-3 |
| Y | JP 11-158559 A (Sumitomo Metal Industries, Ltd.), 15 June, 1999 (15.06.99), Claims; drawings (Family: none) | 1-3 |

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other means
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- "&" document member of the same patent family

Date of the actual completion of the international search
07 January, 2005 (07.01.05)Date of mailing of the international search report
25 January, 2005 (25.01.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

INTERNATIONAL SEARCH REPORTInternational application No.
PCT/JP2004/015025**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Y | JP 57-35620 A (Oriental Engineering Kabushiki Kaisha), 26 February, 1982 (26.02.82), Detailed Explanation of The Invention (Family: none) | 1-3 |
| Y | JP 53-110909 A (Oriental Engineering Kabushiki Kaisha), 28 September, 1978 (28.09.78), Detailed Explanation of The Invention (Family: none) | 1-3 |